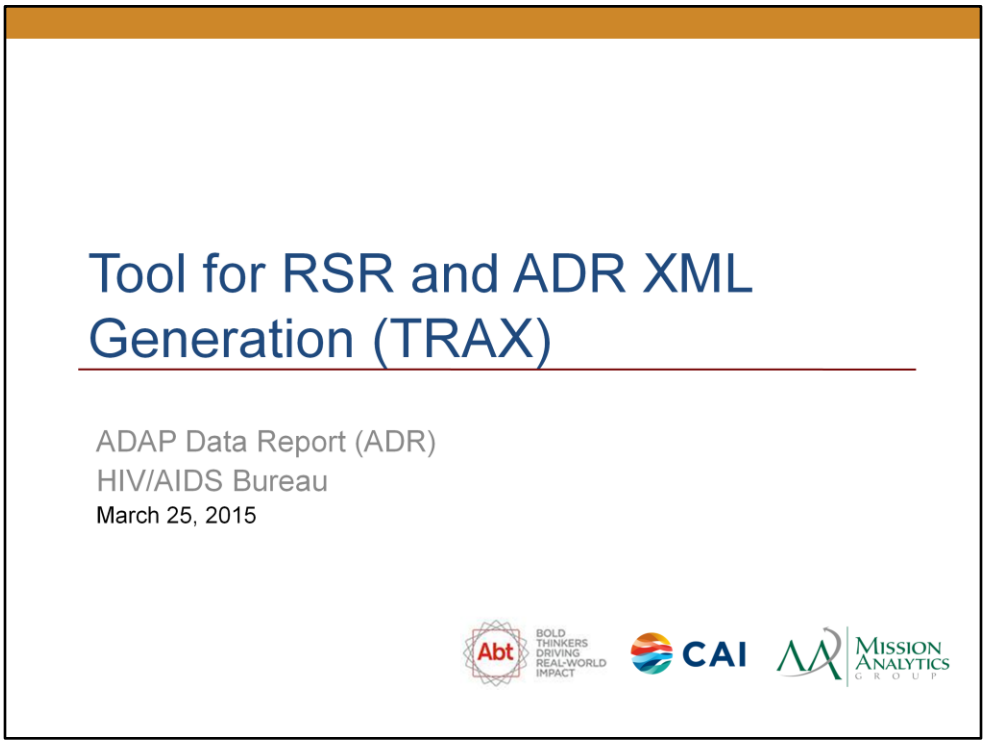
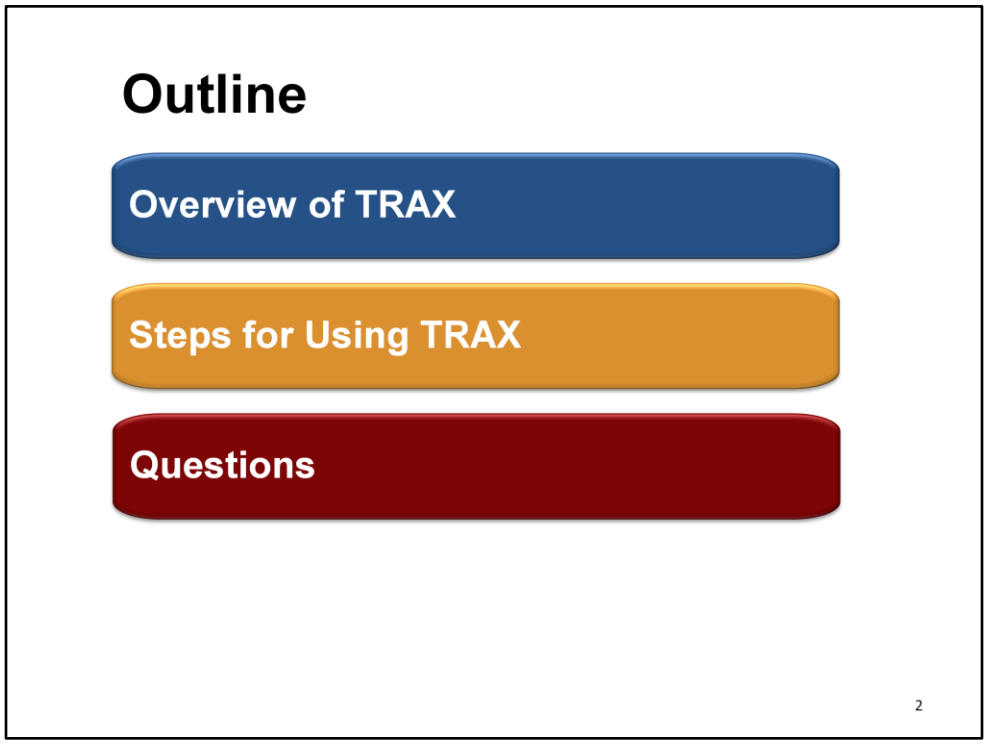


Welcome to the webcast about TRAX, the Tool for RSR and ADR XML Generation. My name is Michael Costa, and I am part of the DART Team, one of the Technical Assistance providers responsible for the RSR and the ADR. I am joined by my colleague from DART, Ellie Coombs. This webcast will help you decide if TRAX, formally known as Rx-REX, is for you, as well as give you detailed instructions on how to use TRAX for the ADR.

Now I'll turn this over to our presenter, Ellie.



TRAX is a free tool that you can download from the TARGET center website. It take files with your client-level data as input and converts those data to the correctly structured XML file.

I'll start the presentation with an overview of TRAX, including why we developed it, and differences between TRAX and Rx-REX. Then, we'll go into more detail about each step. Throughout this discussion, I'll be pulling up resources and demonstrating key activities.

This webinar is very detailed, but don't worry. There is a detailed user manual with the same information that comes along with the TRAX download package. The webinar recording and slides will also be posted on TARGET.

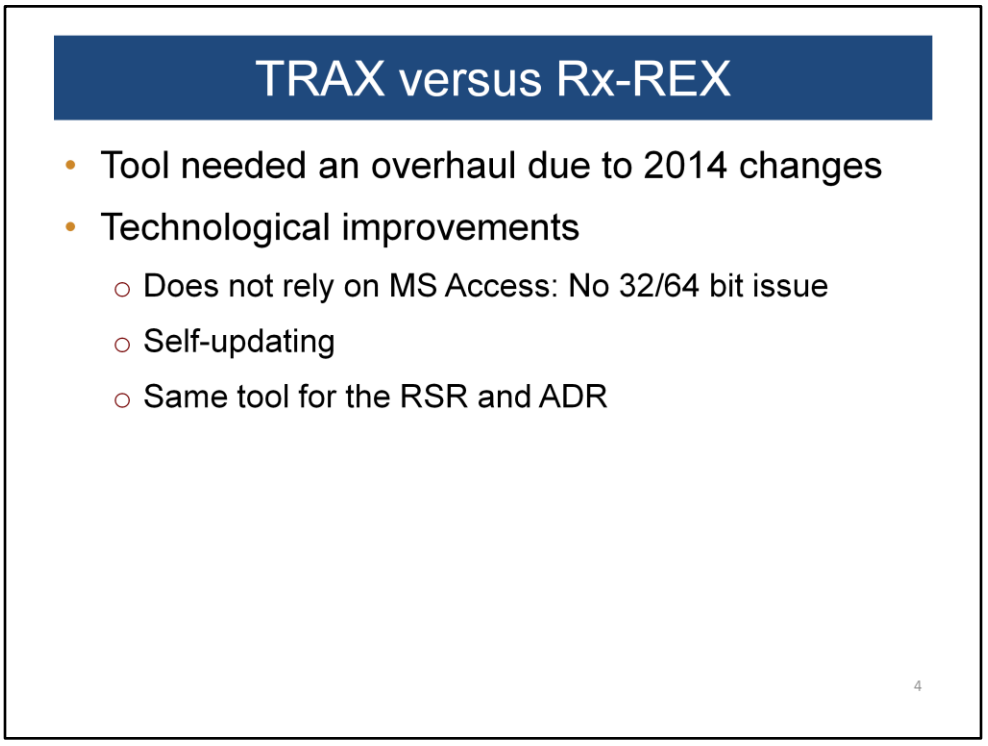
This webinar just focuses on TRAX for the ADR. If you are here for the RSR, you should go to the TARGET Center website and review the webinar we did in October specifically for the RSR.

Why Use TRAX?

- You don't use an ADR-Ready System to capture ADR data
- You don't have the resources to create your own XML export

3

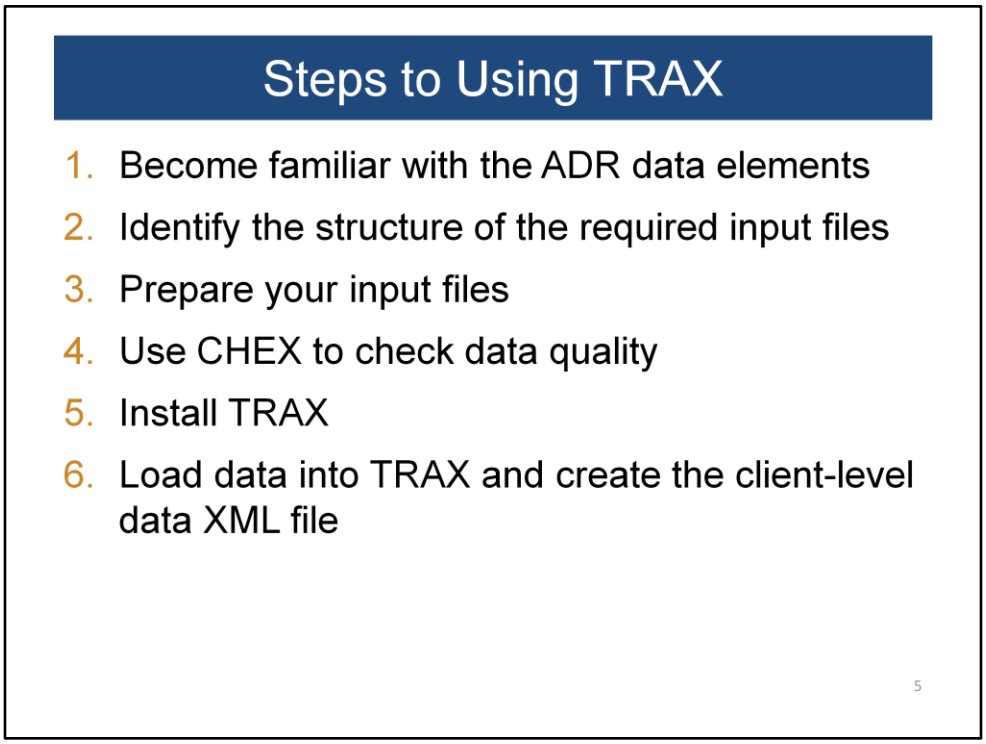
About half of ADAPs used Rx-REX last year to create the ADR client-level data file. TRAX is a good tool if you don't already input your data into an ADR Ready System, such as CAREWare, and you don't have the resources or desire to create the XML export function yourself. It's probably easier to get your data into the input files required for TRAX than to create the XML file.


TRAX versus Rx-REX
Tool needed an overhaul due to 2014 changes
Technological improvements
Does not rely on MS Access: No 32/64 bit issue
Self-updating
Same tool for the RSR and ADR
4

I want to compare TRAX and Rx-REX. Although TRAX was mainly developed because the ADR was changing so much, Leidos decided to "build a better mouse trap." For one, we've had some issues with Access. Rx-REX was not compatible with 64 bit operating systems. Therefore, TRAX removes Access out of the equation entirely.

In addition, TRAX is self-updating. After you install TRAX and then open it again, if there have been any updates, you will be prompted to install the latest version. This means we don't have to find you and email you every time we make a change.

Finally, TRAX also works with the RSR. You use the same tool for the different reports.

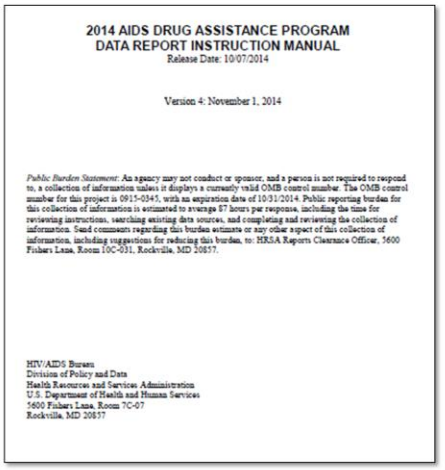

Steps to Using TRAX
1. Become familiar with the ADR data elements
2. Identify the structure of the required input files
3. Prepare your input files
4. Use CHEX to check data quality
5. Install TRAX
6. Load data into TRAX and create the client-level data XML file
5

Now, let's go over the steps to using TRAX.

1. Become familiar with the ADR data elements.
2. Identify the structure of the required input files.
3. Prepare your input files.
4. Use CHEX to check data quality.
5. Install TRAX.
6. Load data into TRAX and create the client-level data XML file.

ADR Instruction Manual

- Detailed description of ADR data elements
- https://careacttarget.org/library/adr-instruction-manual



2014 AIDS DRUG ASSISTANCE PROGRAM
DATA REPORT INSTRUCTION MANUAL
Release Date: 10/07/2014

Version 4: November 1, 2014

Public Burden Statement: An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this project is 0915-0345, with an expiration date of 10/31/2014. Public reporting burden for this collection of information is estimated to average 87 hours per response, including the time for reviewing instructions, searching existing data sources, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: HRSA Reports Clearance Officer, 5600 Fishers Lane, Room 10C-031, Rockville, MD 20857.

HIV/AIDS Bureau
Division of Policy and Data
Health Resources and Services Administration
U.S. Department of Health and Human Services
5600 Fishery Lane, Room 7C-07
Rockville, MD 20857

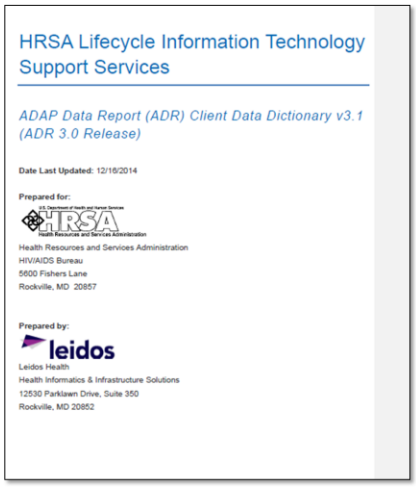
Become familiar with data elements → Identify structure of input files → Prepare input files → Use CHEX → Install TRAX → Load data and create file

The first step is to become familiar with the ADR data elements.

You can do this by carefully reading two resources posted on TARGET. The ADR instruction manual has a detailed description of all ADR data elements.

ADR Data Dictionary (v3.1)

- Required values for each data element
- https://careacttarget.org/library/adap-data-report-adr-download-package


HRSA Lifecycle Information Technology Support Services

ADAP Data Report (ADR) Client Data Dictionary v3.1 (ADR 3.0 Release)

Date Last Updated: 12/16/2014

Prepared for:

HRSA
Health Resources and Services Administration

Health Resources and Services Administration
HIV/AIDS Bureau
5600 Fishers Lane
Rockville, MD 20857

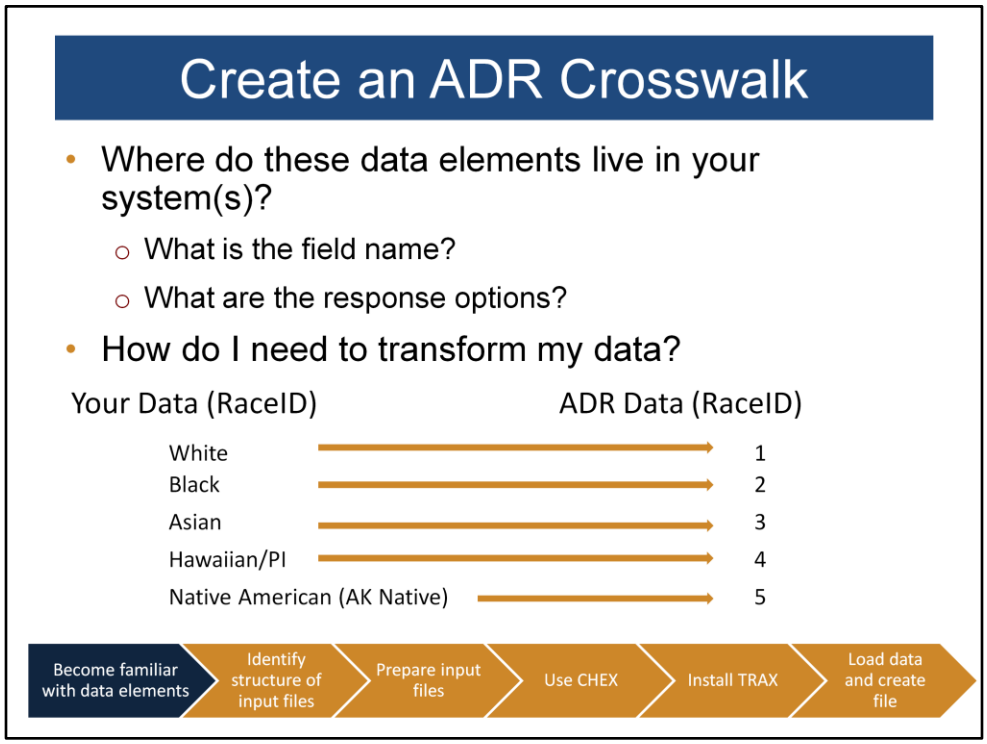
Prepared by:

leidos

Leidos Health
Health Informatics & Infrastructure Solutions
12530 Parklawn Drive, Suite 350
Rockville, MD 20852

Become familiar with data elements → Identify structure of input files → Prepare input files → Use CHEX → Install TRAX → Load data and create file

The data dictionary has the required values for each data element.

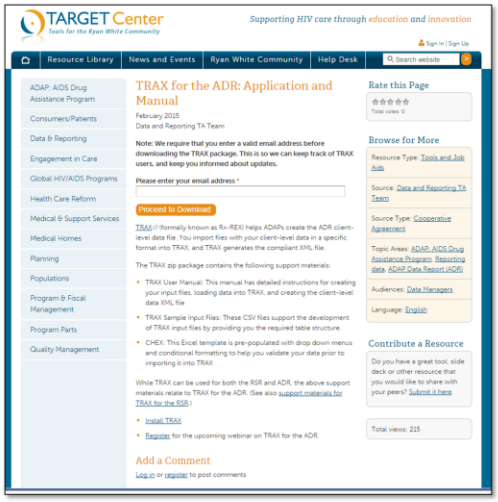


Next, you'll need to create a crosswalk that maps the data elements in the ADR to the data elements in your data management system.
Find out where these data elements live and how they are coded. This will help you assess how you'll need to format your data to correctly report the ADR.

In this example, with the RaceID variable, your own database might categorize clients as "white," "black," etc. However, the ADR requires this variable be categorized as numbers 1 through 5. Using this crosswalk, it will be easier to see and track what data transformations are necessary, as "white" becomes "1," "black" becomes "2," and so on.

Download Support Materials

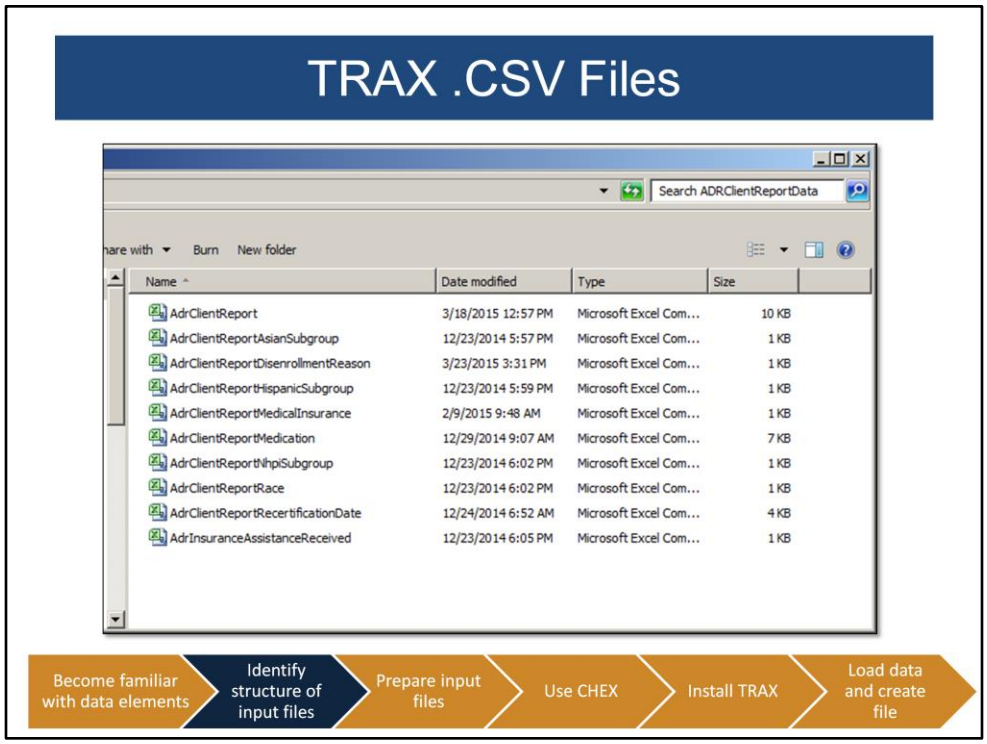
- Instruction manual
- Templates for input files (10 .CSV files)
- https://careacttarget.org/library/trax-adr


TARGET Center
Tools for the Ryan White Community
Supporting HIV care through education and innovation
Resource Library
News and Events
Ryan White Community
Help Desk
TRAX for the ADR: Application and Manual
February 2015
Data and Reporting TA Team
Note: We require that you enter a valid email address before downloading the TRAX package. This is so we can keep track of TRAX users, and keep you informed about updates.
Please enter your email address *
Proceed to Download
Rate this Page
Browse for More
Contribute a Resource
Add a Comment

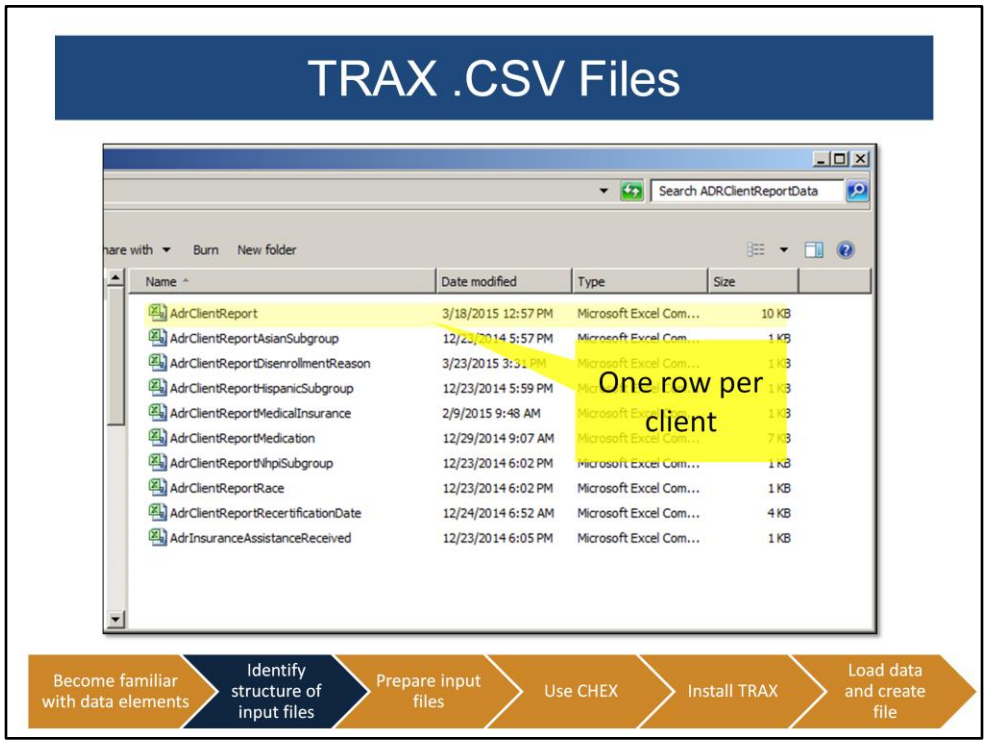
Become familiar with data elements → Identify structure of input files → Prepare input files → Use CHEX → Install TRAX → Load data and create file

Now that you have a good idea of what is required for the ADR, you'll need to start creating the input files, which consist of 10 .CSV files. If you don't know what .CSV is, don't worry. It is essentially the same as Excel and you can easily create a .CSV file from an Excel file using Save As.

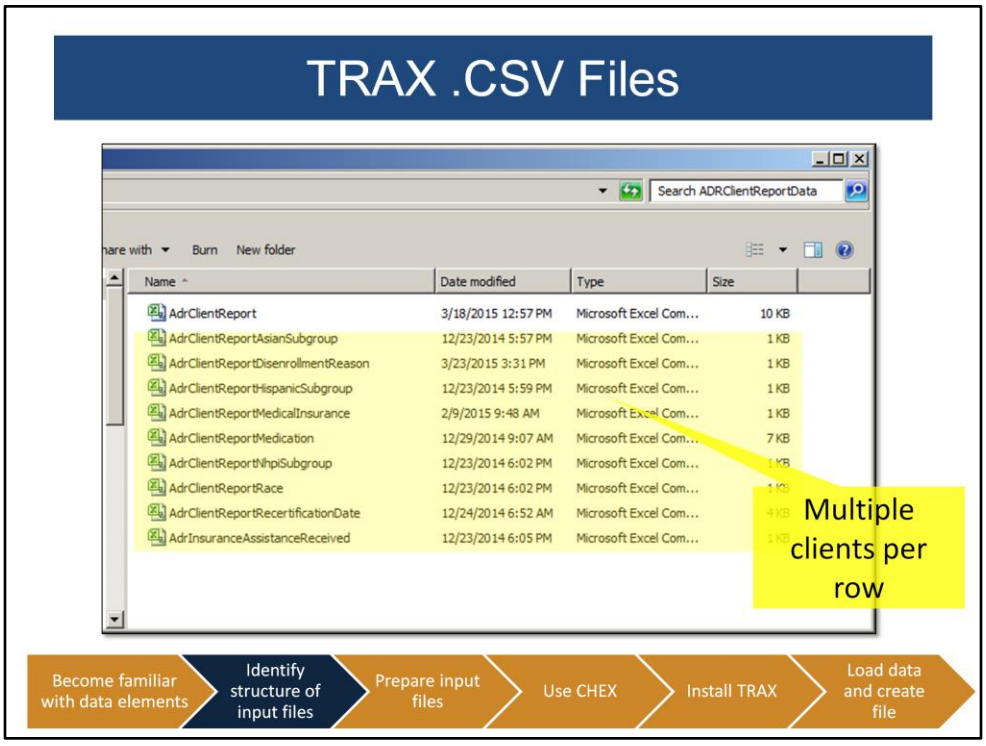
To know how to structure your data, go to the TARGET Center website, input your email address, and download the support package. The support package is a zip file with the TRAX user manual and templates for the 10 input files.


TRAX .CSV Files
Search ADRClientReportData
Burn
New folder
Name
Date modified
Type
Size
AdrClientReport 3/18/2015 12:57 PM Microsoft Excel Com... 10 KB
AdrClientReportAsianSubgroup 12/23/2014 5:57 PM Microsoft Excel Com... 1 KB
AdrClientReportDisenrollmentReason 3/23/2015 3:31 PM Microsoft Excel Com... 1 KB
AdrClientReportHispanicSubgroup 12/23/2014 5:59 PM Microsoft Excel Com... 1 KB
AdrClientReportMedicalInsurance 2/9/2015 9:48 AM Microsoft Excel Com... 1 KB
AdrClientReportMedication 12/29/2014 9:07 AM Microsoft Excel Com... 7 KB
AdrClientReportNhpiSubgroup 12/23/2014 6:02 PM Microsoft Excel Com... 1 KB
AdrClientReportRace 12/23/2014 6:02 PM Microsoft Excel Com... 1 KB
AdrClientReportRecertificationDate 12/24/2014 6:52 AM Microsoft Excel Com... 4 KB
AdrInsuranceAssistanceReceived 12/23/2014 6:05 PM Microsoft Excel Com... 1 KB
Become familiar with data elements
Identify structure of input files
Prepare input files
Use CHEX
Install TRAX
Load data and create file

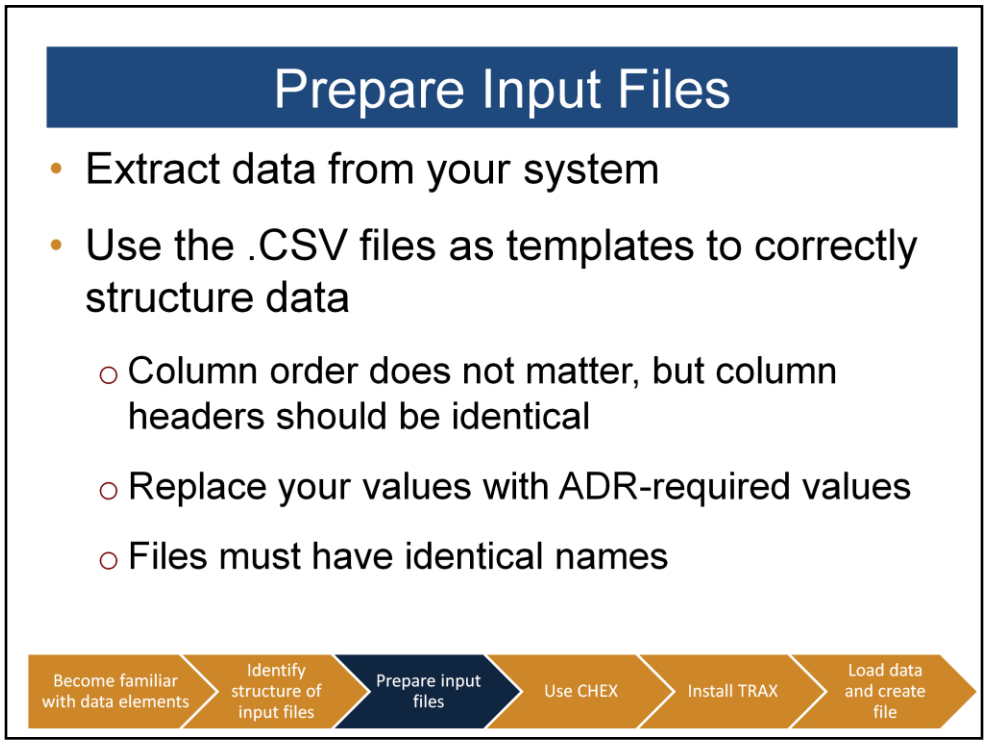
Here is a view of the inside of the folder you'll download from the TARGET Center website with the 10 .CSV files. You'll create a folder that looks exactly like this, but the files will be populated with your data.


TRAX .CSV Files
Search ADRClientReportData
Burn
New folder
Name
Date modified
Type
Size
AdrClientReport 3/18/2015 12:57 PM Microsoft Excel Com... 10 KB
AdrClientReportAsianSubgroup 12/23/2014 5:57 PM Microsoft Excel Com... 1 KB
AdrClientReportDisenrollmentReason 3/23/2015 3:31 PM Microsoft Excel Com... 1 KB
AdrClientReportHispanicSubgroup 12/23/2014 5:59 PM Microsoft Excel Com... 1 KB
AdrClientReportMedicalInsurance 2/9/2015 9:48 AM Microsoft Excel Com... 1 KB
AdrClientReportMedication 12/29/2014 9:07 AM Microsoft Excel Com... 7 KB
AdrClientReportNhpiSubgroup 12/23/2014 6:02 PM Microsoft Excel Com... 1 KB
AdrClientReportRace 12/23/2014 6:02 PM Microsoft Excel Com... 1 KB
AdrClientReportRecertificationDate 12/24/2014 6:52 AM Microsoft Excel Com... 4 KB
AdrInsuranceAssistanceReceived 12/23/2014 6:05 PM Microsoft Excel Com... 1 KB
One row per client
Become familiar with data elements
Identify structure of input files
Prepare input files
Use CHEX
Install TRAX
Load data and create file

The first file contains the bulk of the data elements in the ADR. It has all the data elements with just one response per client, like poverty level and new enrollment flag. You'll have just one row per client in this file.

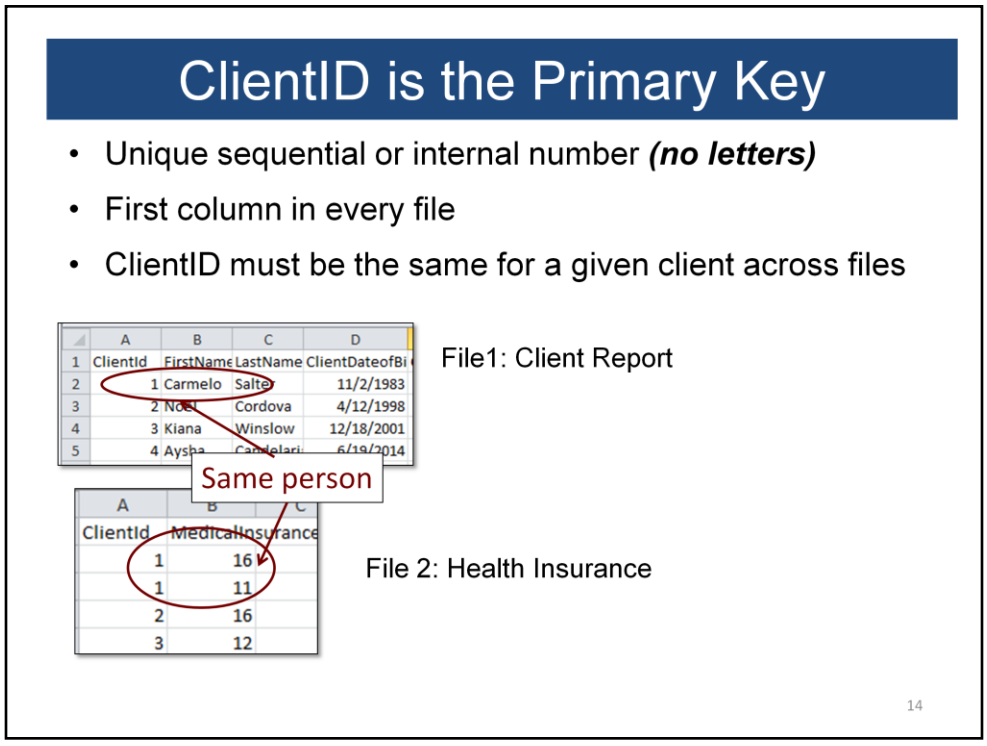

TRAX .CSV Files
Search ADRClientReportData
Burn
New folder
Name
Date modified
Type
Size
AdrClientReport 3/18/2015 12:57 PM Microsoft Excel Com... 10 KB
AdrClientReportAsianSubgroup 12/23/2014 5:57 PM Microsoft Excel Com... 1 KB
AdrClientReportDisenrollmentReason 3/23/2015 3:31 PM Microsoft Excel Com... 1 KB
AdrClientReportHispanicSubgroup 12/23/2014 5:59 PM Microsoft Excel Com... 1 KB
AdrClientReportMedicalInsurance 2/9/2015 9:48 AM Microsoft Excel Com... 1 KB
AdrClientReportMedication 12/29/2014 9:07 AM Microsoft Excel Com... 7 KB
AdrClientReportNhpiSubgroup 12/23/2014 6:02 PM Microsoft Excel Com...
AdrClientReportRace 12/23/2014 6:02 PM Microsoft Excel Com...
AdrClientReportRecertificationDate 12/24/2014 6:52 AM Microsoft Excel Com...
AdrInsuranceAssistanceReceived 12/23/2014 6:05 PM Microsoft Excel Com...
Multiple clients per row
Become familiar with data elements
Identify structure of input files
Prepare input files
Use CHEX
Install TRAX
Load data and create file

Each of the subsequent files represent one data element that allows for multiple responses.


Prepare Input Files
Extract data from your system
Use the .CSV files as templates to correctly structure data
Column order does not matter, but column headers should be identical
Replace your values with ADR-required values
Files must have identical names
Become familiar with data elements
Identify structure of input files
Prepare input files
Use CHEX
Install TRAX
Load data and create file

Once you have downloaded the support package and identified where each of the ADR data elements are, you must extract client-level data from your system or from multiple systems and get it into the format of the 10 .CSV files. Some grantees are able to write programming code that allows them to directly pull data into the .CSV file format. Others may need to extract data in one format and then do some manual formatting. Regardless, this is probably the hardest step to using TRAX.

Here are some things to keep in mind while you structure your data. Although the column order does not matter, the columns headers do. They must be identical to the ones in the .CSV files. You also must replace your values with the ADR-required values. Also, the file names must be identical to the ones in the template.



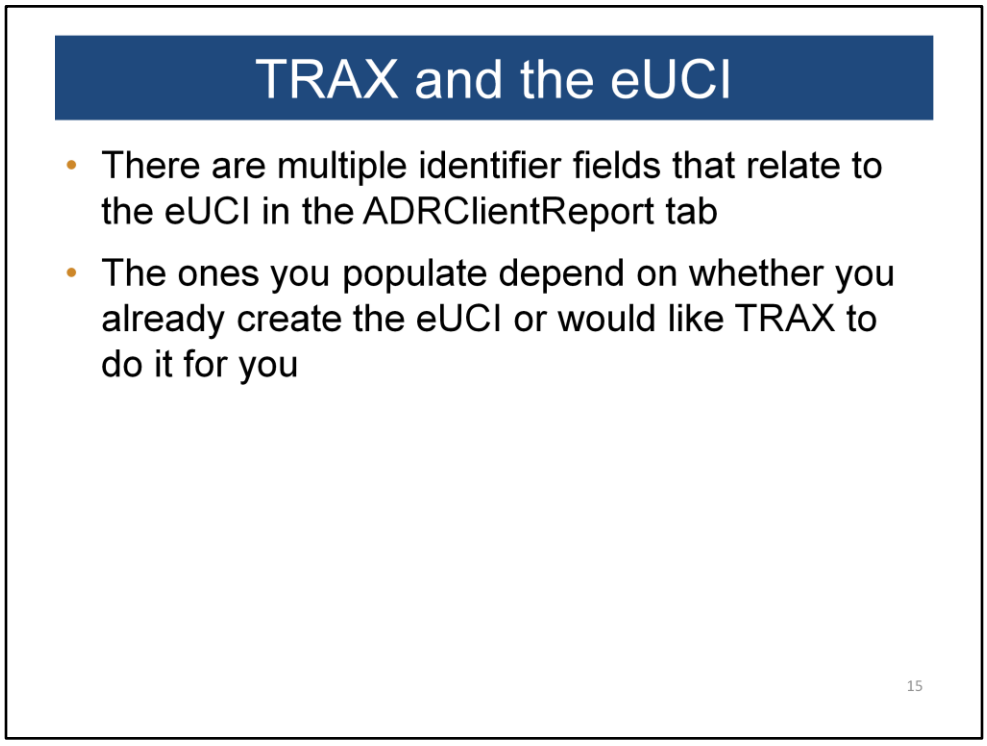
Now, let's talk about a couple of specific data elements.

The records of clients within each file are linked by the Client ID. It is the first column in every file.

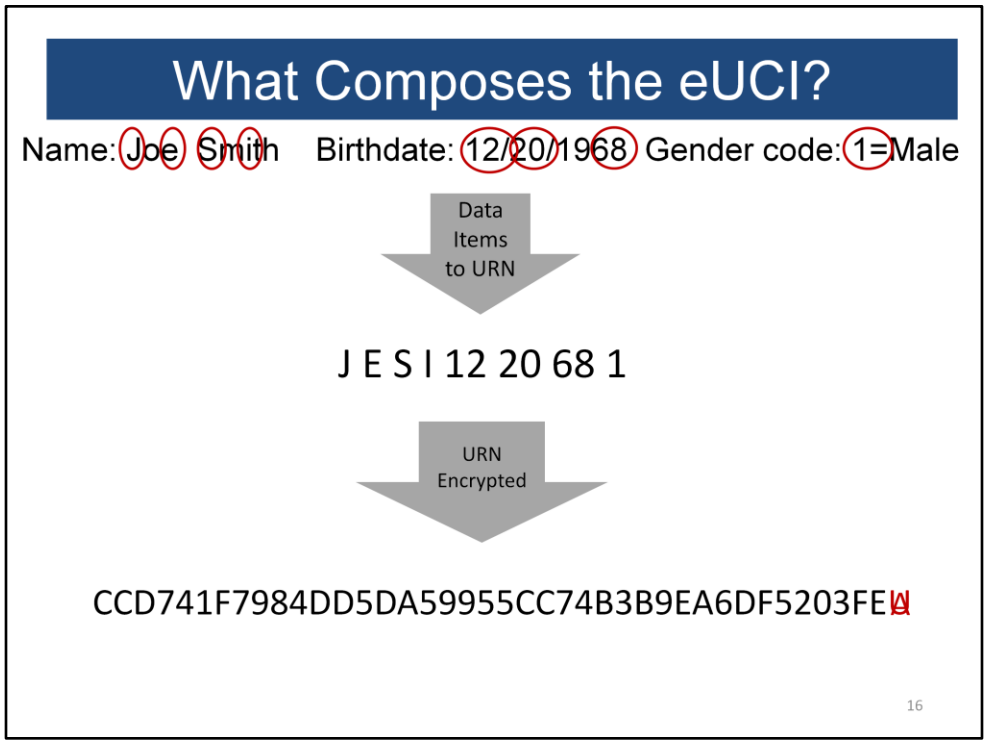
It can be a sequential number or internal number, like a medical record number. They can't have letters. They can only have numbers.

This number must be unique for every client. You must make sure that the same client has the same ID in each table.

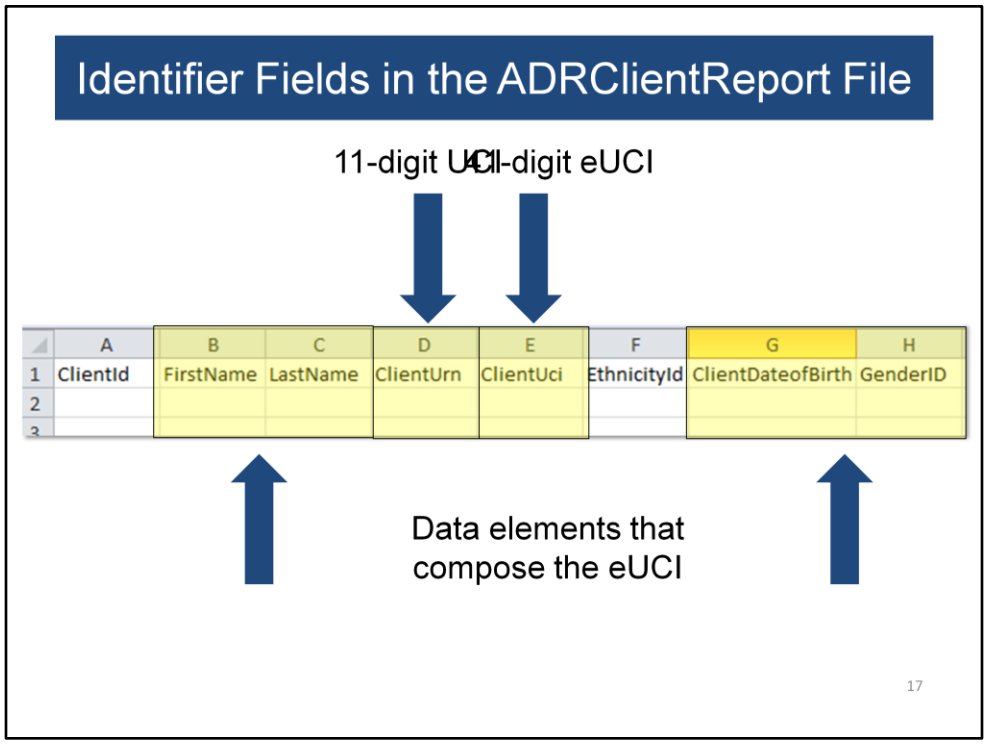
Let's look at an example. Carmelo has an ID of 1. Through this same ID in the health insurance file, we can see that he has health insurance status of 11 and 16.


TRAX and the eUCI
There are multiple identifier fields that relate to the eUCI in the ADRClientReport tab
The ones you populate depend on whether you already create the eUCI or would like TRAX to do it for you
15

Another important data element I want to go over is the eUCI. That first .CSV file, which is the ADRClientReport, has multiple data elements related to the eUCI. The ones you populate depend on whether you already create the eUCI or whether you want TRAX to create it for you.


What Composes the eUCI?
Name: Joe Smith Birthdate: 12/20/1968 Gender code: 1=Male
Data Items to URN
J E S I 12 20 68 1
URN Encrypted
CCD741F7984DD5DA59955CC74B3B9EA6DF5203FE
16

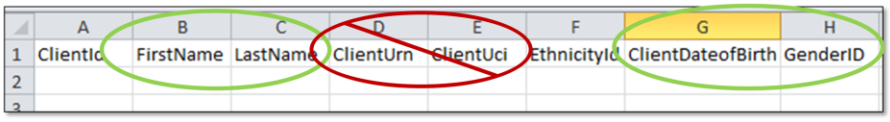
As a reminder, the eUCI is created from the first and third letters of the first name, first and third letters of the last name, date of birth, and a code for gender. This creates the 11-digit URN or unencrypted UCI. That URN is then encrypted into a 40-digit string. A 41st-digit lets HAB know if any other client within the ADAP's file has the same eUCI. It should be U for unique, or A, B, C etc. to distinguish clients.



Now, let's take a look at those columns related to the eUCI in the ADR Client Report file. These are the ones that represent the data elements that create the eUCI. This contains the 11-digit unencrypted eUCI. And, this contains the 41-digit eUCI.

ADAP Does Not Create the eUCI

- Populate:
  - Name
  - Date of birth
  - Gender
- Leave the ClientUCI and ClientURN fields blank



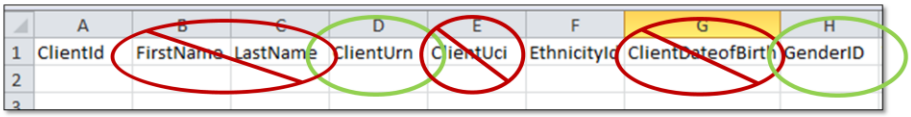
	A	B	C	D	E	F	G	H
1	ClientId	FirstName	LastName	ClientUrn	ClientUci	EthnicityId	ClientDateofBirth	GenderID
2								
3								

18

If you do not already create the eUCI, you need to populate the first and last name, full date of birth, and gender ID. You can leave the URN and eUCI columns blank.

ADAP Creates the URN

- Populate the ClientURN field with the pre-created URNs
- Leave other fields blank



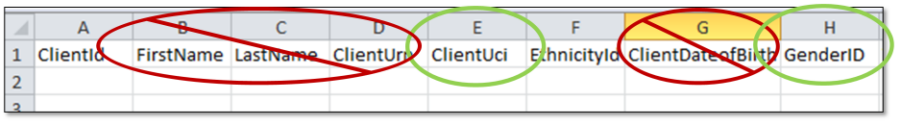
	A	B	C	D	E	F	G	H
1	ClientId	FirstName	LastName	ClientUrn	ClientUci	EthnicityId	ClientDateofBirth	GenderID
2								
3								

19

If you already create the 11-digit UCI and you just want TRAX to encrypt it for you, just populate column D and leave the other columns blank. Note that GenderID is an ADR data element, so you need to input that regardless of your approach.

ADAP Creates the eUCI

- Populate the ClientUCI field with the pre-created eUCIs
- Leave the ClientURN, name and DOB fields blank



20

If you already create the eUCI, then you can populate the ClientUci column and leave the other columns blank. Once again, you need the GenderID regardless because it is an ADR data element.

Viral Load

- For "undetectable" viral load counts:
  - Report the lower test limit for the viral load count
  - If you don't know the threshold, report 0 for clients with "undetectable" status

LastCd4Date	LastCd4Cou	LastViralLoadDate	LastViralL
3/14/2014	438	3/14/2014	320
10/15/2014	113456	10/15/2014	48

Client's viral load is undetectable; Threshold of 48

21

Another data element that we have received questions about relates to viral load. The ADR does not accept "undetectable" for the viral load value. Therefore, for your undetectable clients, you should input the test value under which a client is considered undetectable. In this example, you see this client has an undetectable viral load. The test has a threshold of 48. If you don't know the threshold, report 0. Note that there is no longer an "IsDetectable" field in TRAX.

Medications

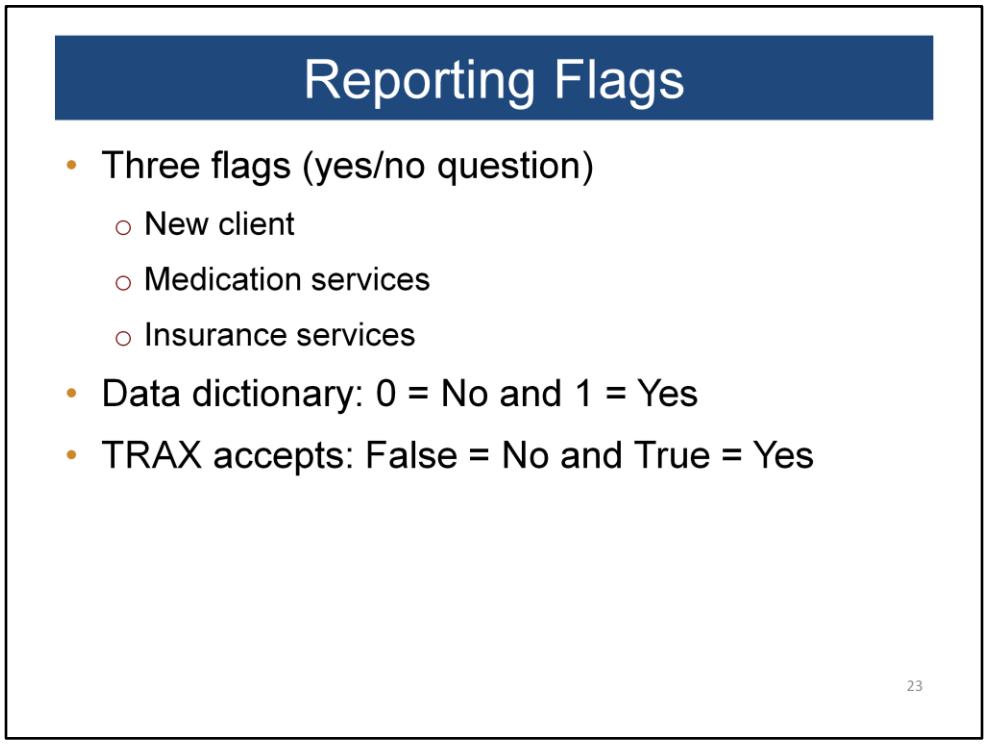
- Report a row for each unique combination of client, D-code, and dispense date
- Client has three rows:
  - Two D-codes
  - One D-code with two dispense dates

	A	B	C	D
1	ClientId	Medicatio	MedicationStartDat	Medicatio
2	21165	d00034	9/10/2014	30
3	21165	d00034	12/10/2014	30
4	21165	d03858	12/10/2014	30

22

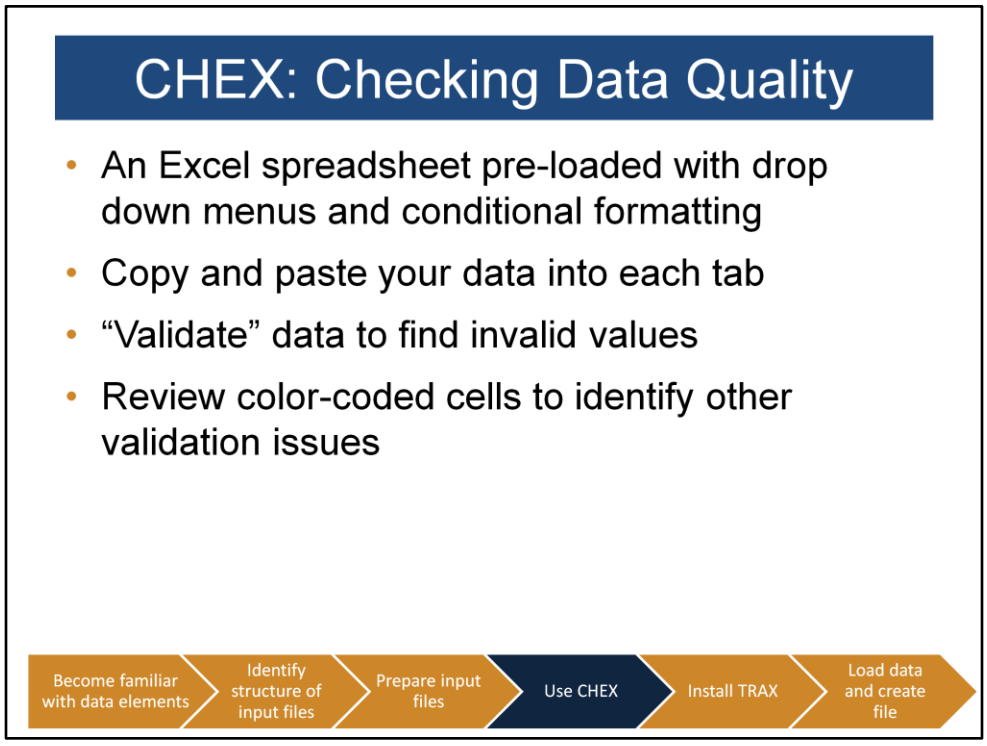
I also want to note that in the medications file, you report a row for every unique combination of client, D-code, and dispense data. In this example, the client has three rows. One D-code has one dispense data, and another D-code has two dispense dates.

Note that TRAX only accepts D-codes, not NDCs, so you must map these codes prior to loading data into TRAX.



I have one final comment on tricky data elements. There are three flags in the ADR, meaning that they require a yes or no response. They are: 1. Is the client new? 2. Did the client receive medication services? And 3. Did the client receive insurance services?

According to the data dictionary, ADAPs should report 0 for No and 1 for Yes. However, this version of TRAX (2.0.0.2) only accepts False for No and True for Yes. This is being fixed so that TRAX will be aligned with the data dictionary, but in the meantime, use True and False.

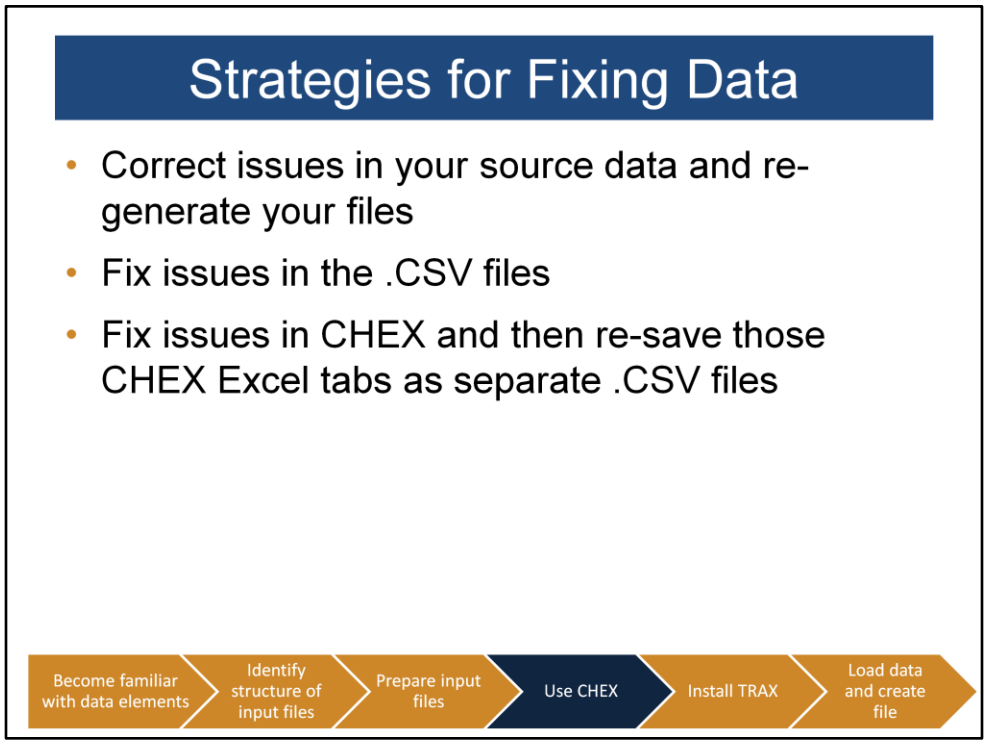

CHEX: Checking Data Quality
An Excel spreadsheet pre-loaded with drop down menus and conditional formatting
Copy and paste your data into each tab
"Validate" data to find invalid values
Review color-coded cells to identify other validation issues
Become familiar with data elements
Identify structure of input files
Prepare input files
Use CHEX
Install TRAX
Load data and create file

The next step is to use a tool called CHEX. It is an Excel spreadsheet pre-loaded with drop down menus and conditional formatting to help you check the quality of your data. It is also located in the support package.

There is a tab for each of the 10 .CSV files. Once you have your .CSV files populated, you can copy and paste them into the 10 tabs. You "Validate" data to find invalid values and review color coded cells to identify other validation issues.

There is a tab for every .CSV file. The first check is on valid values. You can see the drop down menu here that tells you which values are acceptable. To make sure your values match those, go to Data, Data Validations, and Circle Invalid values.

Through conditional formatting, CHEX also color codes cells if there are issues.

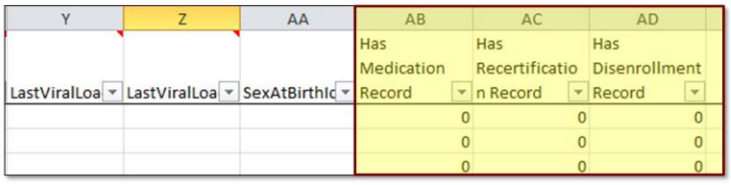

Strategies for Fixing Data
Correct issues in your source data and re-generate your files
Fix issues in the .CSV files
Fix issues in CHEX and then re-save those CHEX Excel tabs as separate .CSV files
Become familiar with data elements
Identify structure of input files
Prepare input files
Use CHEX
Install TRAX
Load data and create file

If you do find issues with your data, you can fix them using one of the following methods:

1. Correct them in your source data and re-generate your files.
2. Fix them in the .CSV files.
3. Fix them in CHEX and then re-save those CHEX Excel tabs as separate .CSV files.

Creating .CSV Files from CHEX

- CHEX has some columns not in the .CSV templates that allow us to run validations on the data
- If you create your .CSV files directly from the CHEX spreadsheet, delete these extra columns

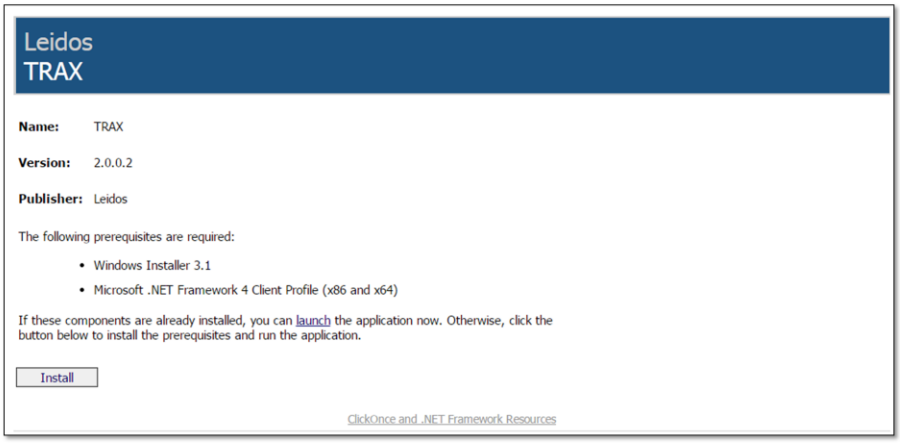


Y	Z	AA	AB	AC	AD
LastViralLoa	LastViralLoa	SexAtBirthIc	Has Medication Record	Has Recertification Record	Has Disenrollment Record
			0	0	0
			0	0	0
			0	0	0

If you use that last approach, make sure to delete some of CHEX's extra columns that we created to help with the validations. TRAX won't accept a file with extra columns.

Install TRAX

https://performance.hrsa.gov/hab/trax/publish.htm


Leidos
TRAX
Name: TRAX
Version: 2.0.0.2
Publisher: Leidos
The following prerequisites are required:
Windows Installer 3.1
Microsoft .NET Framework 4 Client Profile (x86 and x64)
If these components are already installed, you can launch the application now. Otherwise, click the button below to install the prerequisites and run the application.
Install
ClickOnce and .NET Framework Resources

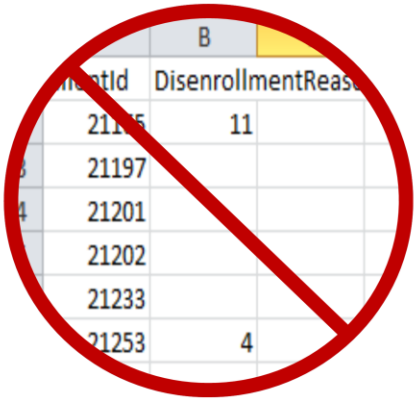
Become familiar with data elements → Identify structure of input files → Prepare input files → Use CHEX → **Install TRAX** → Load data and create file

Avoid Common Mistakes

- Close files prior to upload
- Include all files even if you don't have data (just the header row)
- Capitalization matters!

Missing Data

- In the ADR Client Report file, leave cell blank
- In the other files, exclude clients entirely



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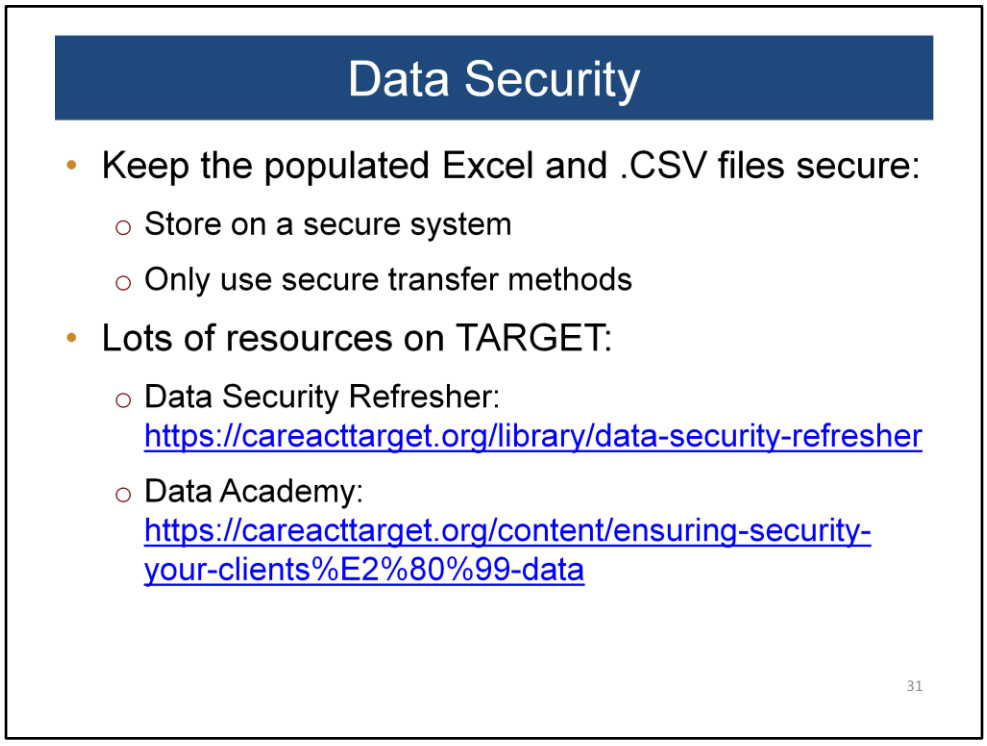

Now, I want to discuss data security. The client XML does not contain personally identifying information, such as name or full date of birth. However, most likely, your Excel spreadsheet or .CSV file will. So, I want to emphasize the importance of keeping these data secure. Store your .CSV files on secure systems, such as behind firewalls. Also, only use secure transfer mechanisms to transfer the files.

If you would like more information about data security, just go to TARGET and do a search on "data security." There are lots of archived webcasts and resources there.

Resources and Questions

- Accessing TRAX: https://careacttarget.org/library/trax-adr
- Questions?
  - Start with the DART Team: Data.TA@caiglobal.org
  - Be prepared to share your desktop with us through webinar software (we'll send you a link)
  - We may connect you with the developers at Leidos, if necessary

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